REMARKS

This Amendment is submitted in response to the Final Office Action dated April 16, 2008. The Office Action rejected claims 11, 14-16, 18-21 under 35 U.S.C. §103. Claim 11 is amended herein. Applicants believe the rejections are improper for at least the reasons below. The Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due and owing.

The Office Action rejects claims 11, 14, 20 and 21 under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,695,564 to Imahashi ("Imahashi") in view of JP 10-214682 to Tanamura et al. ("Tanamura") and U.S. Patent No. 4,492,180 to Martin ("Martin"). Of these rejected claims, claim 11 is the sole independent claim. Claim 11 has been amended to delete the previously added element reciting: "wherein the organic material layers include a hole injection layer, a hole transfer layer, and a light emitting layer formed in a predetermined pattern and at predetermined thicknesses for each emitting color, and wherein a thickness of at least one of the hole injection layer and the hole transfer layer varies with respect to a color of light emitted from the associated light emitting layer." As such, claim 11 is in the same form as in the response to the Office Action dated October 26, 2007.

Applicants respectfully submit that Imahashi, Tanamura and Martin do not teach or suggest the features of the presently claimed invention, even assuming that they are properly combinable. The Office Action appears to primarily rely on Imahashi for the alleged disclosure of:

(a) "a first alignment mechanism (Fig. 8, U3a) for aligning a mask ... to the substrate and for detachably attaching the mask and the substrate;"

(b) "a first formation unit (U1a, large process unit, U2a, transfer unit, U3a, interconnection unit/alignment unit, in/out unit, U5 in Fig. 2, small processing unit are all called first formation unit) including a plurality of vacuum processing chambers ... for forming the plurality of organic material layers on the substrate at a first color position;"

(c) "a second alignment mechanism (U3b) for changing the alignment between the substrate and the mask;"

(d) "a second formation unit (U1a, large process unit, U2a, transfer unit, U3a, interconnection unit/alignment unit, in/out unit, U5 in Fig. 2, small processing unit are all called

second formation unit) including a plurality of vacuum processing chambers ... for forming the plurality of organic material layers on the substrate at a second color position;"

(e) "wherein each of the vacuum processing chambers correspond to each of the organic material layers;" and

(f) "wherein the second alignment mechanism (U3b) is provided to connect the first formation unit (U1a) and the second formation unit (U1b) in series thereby providing flow-through processing." (See, Office Action, pgs. 3-4).

Imahashi fails to disclose or suggest all of the features of the presently claimed invention, as admitted in the Office Action. (See, Office Action, pgs. 5-6). In particular, Imahashi fails to disclose: an apparatus for manufacturing an organic electroluminescence display; and a first alignment unit for aligning a mask having openings corresponding to the predetermined pattern, to the substrate and for detachably attaching the mask and the substrate. (See, Office Action, pg2. 5-6). Moreover, Imahashi relates to semiconductor wafers and does not disclose aligning or realigning a mask relative to a substrate, especially in a unit connecting a first formation unit to a second formation unit. That is, the interconnection unit U3b in Imahashi appears to be a transfer station, rather than an alignment unit for realigning a mask to a substrate for the formation of a second light emitting color.

As previously argued, Tanamura fails to disclose a first formation unit and a second formation unit, each unit including a plurality of vacuum processing chambers. Indeed, each 'formation unit' in Tanamura (e.g., 22, 22a, 22b and 22c) only corresponds to or includes one processing chamber (e.g., 22).

Moreover, Tanamura does not disclose an alignment chamber as part of this apparatus, much less a second alignment mechanism for changing the alignment between the substrate and the mask, and for detachably attaching the substrate and the mask again, and a second formation unit including a plurality of vacuum processing chambers for sequentially forming the organic material layers on the substrate at a second color position, as recited in amended independent Claim 11. Also, Tanamura fails to disclose a second alignment mechanism that is provided to connect the first formation unit and the second formation unit in series, as recited in amended claim 11. Instead, Tanamura only discloses empty transfer chambers 22c-26c. The Office Action cites to paragraph [0071] of Tanamura for alleged support of an alignment chamber.

However, this paragraph merely appears to mention that the "substrate 1 is installed on the metal mask arranged beforehand." (See, Tanamura, [0071]). This implies that whatever alignment is performed between the mask and substrate, is performed before the device enters the first chamber 21 at an aligner located elsewhere. Therefore, contrary to the presently amended claims, Tanamura does not contemplate performing an alignment and/or realignment between a substrate and a mask in the context of the disclosed manufacturing apparatus. Accordingly, Tanamura does not achieve the level of flow through processing of the presently claimed invention.

Martin is relied on merely for the purported disclosure of a first alignment mechanism for aligning a mask, having openings corresponding to the predetermined pattern, to the substrate and for detachably attaching the mask (30,32) and the substrate (64). (See, Office Action, pg. 8). Again, this is not taught or suggested in the context of a manufacturing apparatus to provide for flow through processing as in the presently claimed invention. Therefore, even assuming that all of the references are properly combinable, the combined teachings still do not disclose or suggest utilizing a mask/substrate alignment/realignment unit between different formation chambers. Accordingly, Martin fails to cure the deficiencies of Imahashi and Tanamura as discussed above.

For at least the reasons discussed above, Imahashi, Tanamura and Martin fail to render obvious amended independent claim 11, and claims 14, 20 and 21 that depend therefrom, even assuming that they are properly combinable.

Accordingly, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 11, 14, 20 and 21 be withdrawn.

The Office Action rejected claims 15, 16, 18 and 19 under 35 U.S.C. §103(a) as being unpatentable over Imahashi in view of Tanamura, Martin and in view of U.S. Patent Publication No. 2001/0006827 to Yamazaki et al. ("Yamazaki"). Yamazaki is relied on for the purported teaching of an attachment fixture including a magnet plate for attaching the substrate and the mask and the mask is formed of a magnetic material. (See, Office Action, pg. 3). Therefore, Yamazaki fails to cure the deficiencies of Imahashi, Tanamura and Martin, as discussed above.

Accordingly, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 15, 16, 18 and 19 be withdrawn.

The Office Action rejected claim 19 under 35 U.S.C. §103(a) as being unpatentable over Imahashi in view of Tanamura, Martin, Yamazaki as applied to claims 11, 14-16 and 18 above, and further in view of U.S. Patent No. 6,214,631 to Burrows et al. ("Burrows"). Burrows is relied on for the purported disclosure of a shadow mask positioned in a first position over a substrate, where a first process is performed on the substrate through the shadow mask and then the shadow mask is moved to a second position over the substrate and measured relative to the first position. (See, Office Action, pg. 11). For at least the reasons given above, Burrows fails to cure the deficiencies of Imahashi, Tanamura, Yamazaki and Martin.

For at least the reasons discussed above, Imahashi, Tanamura, Yamazaki, Martin and Burrows fail to render obvious claim 19, even assuming that they are properly combinable.

Accordingly, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 19 be withdrawn.

Accordingly, Applicants respectfully submit that the present application is in condition for allowance and earnestly request reconsideration of same.

Respectfully submitted,

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